



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,586	11/28/2001	Paul D. Franzon	5051-575	6227
20792	7590	11/14/2003	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC			LEE, HSIEN MING	
PO BOX 37428			ART UNIT	PAPER NUMBER
RALEIGH, NC 27627			2823	

DATE MAILED: 11/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/997,586

Applicant(s)

FRANZON ET AL.

Examiner

Hsien-Ming Lee

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 75-77 and 90-110 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 75-77, 92-97, 100-105 and 108-110 is/are rejected.
- 7) ☒ Claim(s) 90, 91, 98, 99, 106 and 107 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Remarks*

1. Applicants' election to claims 75-77 and cancellation to claims 1-74 and 78-89 is acknowledged. Claims 90-110 are newly added. Thus, claims 75-77 and 90-110 are pending in the application.
2. The disclosure is objected to because of the following informalities: a brief drawing description to each figure is required. See M.P.E.P. 608.01(f).

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 75-77, 92-97, 100-105 and 108-110 are rejected under 35 U.S.C. 102(e) as being anticipated by Brady et al. (US 6,529,385).

In re claims 75, 95 and 103, Brady et al., in Fig. 1C and related text, teach the claimed electrical connector comprising:

- a first mating connector substrate 120 including a first mating connector face (i.e. a bottom surface of 120);
- a first array of inductors 150 (col. 4, lines 15-16) on the first mating connector face;
- a second mating connector substrate 120' including a second mating connector face (i.e. a top surface of 120');

- a second array of inductors 150 on the second mating connector face;
- the first and second mating connector substrates being configured via a mechanical interface 124 to maintain the first and second mating connector faces in closely spaced apart relation to provide inductive coupling between corresponding inductors in the first and second arrays of inductors (col. 4, lines 9-32).

In re claims 76, 96 and 104, Brady et al also teach comprising at least one pin 202 (Fig. 2B and col. 7, lines 10-13) and at least one corresponding pin clip on at least one of the first and second mating connector substrates and configured to maintain the first and second mating connector faces in the closely spaced apart relation.

In re claims 77, 97 and 105, Brady et al also teach that the inductors 150 in the first and second arrays of inductors also include capacitance (i.e. bypass capacitance) associated therewith (col. 4, lines 51-54).

In re claims 92, 100 and 108, Brady et al also teach comprising a first mutual inductance coupling element 314 on at least one of the inductors in the first array of inductors 150 and a second mutual inductance coupling element 324 on a corresponding at least one of the inductors in the second array of inductors (Fig. 3).

In re claims 93, 101 and 109, Brady et al also teach that the first and second mating connector substrates 410 and 100 are configured to separably maintain the first and second mating connector faces in closely spaced apart relation (Fig. 4).

In re claims 94, 102 and 110, Brady et al also teach that the first and second mating connector substrates 120 and 120' are configured to fixedly maintain via 124 the first and second mating connector faces in closely spaced apart relation (Fig. 1C).

*Allowable Subject Matter*

5. Claims 90, 91, 98, 99, 106 and 107 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record neither teaches nor suggests the electrical connector comprises a DC offset compensating receiver that is coupled to at least one of the inductors in the first and/or second arrays of inductors (claims 90, 98 and 106); and further comprises a current mode driver that is coupled to at least one of the inductors in the first and/or second arrays of inductors (claims 91, 999 and 107).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hsien-Ming Lee whose telephone number is 703-305-7341. The examiner can normally be reached on M-F (9:00 ~ 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 703-306-2794. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Hsien-Ming Lee  
Examiner  
Art Unit 2823



Nov. 8, 2003